

ABSTRACT OF THE DISCLOSURE

A top surface of a wafer is provided with an n-type source region, an n-type drain region, and an n-type semiconductor region. Dry etching using a plasma is performed with respect to an interlayer insulating film deposited on the wafer to form openings reaching the respective regions, followed by light etching for removing a damaged layer. In this case, exciting light is supplied intermittently to the n-type semiconductor region. The progression of the removal of the damaged layer and the stage of development of a newly damaged layer are sensed by monitoring the change rate of the intensity of reflected probe light in the presence and absence of the exciting light, resulting in the formation of a semiconductor device having low and equal contact resistance. In-line control using optical evaluation enables the implementation of semiconductor devices with excellent and consistent properties.